

General Operation Permit Application
Small Heating Systems

Those applying for the Small Heating System General Operation Permit must meet the following criteria:

- A) The heating system must use only group 1 virgin fossil fuels, as defined in s. NR 445.02(11), Wis. Adm. Code.
Group 1 virgin fossil fuels consist of natural gas, liquid petroleum gas, distillate fuel oil, gasoline and diesel fuel.
- B) Rated heat input capacity of the heating system must be less than 100 mmBTU/hr
- C) If this heating system is the only emission unit existing at the facility, the rated heat input capacity of the heating system must be greater than the following:
 - 1) 40 mmBTU/hr for gaseous fuel fired units
 - 2) 10 mmBTU/hr for liquid fuel fired units
- D) If this heating system is not only emission unit existing at the facility, then the rated heat input capacity of the heating system must be greater than 5 mmBTU/hr.
- E) If the heating system is located in or has a significant impact on an area which has been designated nonattainment for particulates, sulfur dioxide, nitrogen oxides, carbon monoxide or lead, maximum theoretical emissions of the air contaminant for which the area has been designated as nonattainment must be less than the following:
 - 9.0 pounds per hour for sulfur dioxide and carbon monoxide nonattainment areas;
 - 5.7 pounds per hour for particulate matter or nitrogen dioxide nonattainment areas;
 - 0.13 pound per hour for lead nonattainment areas.
- F) The heating system must be in compliance with the applicable requirements stated on the following pages, which are defined for each of the categories listed below.

Gaseous fuel fired units fit into four categories:

- 1) Those constructed or modified before April 1, 1972 which are outside Subregion 1 LMAQR and Southeast Wisconsin Interstate AQCR.
- 2) Those constructed or modified before April 1, 1972 which are inside Subregion 1 LMAQR and outside Southeast Wisconsin Interstate AQCR.
- 3) Those constructed or modified before April 1, 1972 which are outside Subregion 1 LMAQR and inside Southeast Wisconsin Interstate AQCR.
- 4) Those constructed or modified after April 1, 1972.

Subregion 1 of the Lake Michigan Air Quality Region (LMAQR) is made up of the following counties: Winnebago, Outagamie and Brown. The Southeast Wisconsin Interstate Air Quality Control Region (AQCR) is made up the following counties: Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington and Waukesha.

Liquid fuel fired units fit into the above 4 categories plus 2 additional categories:

- 5) Those constructed or modified after June 9, 1989 which have a rated heat input capacity between 10 and 100 mmBTU/hr.
- 6) Those constructed or modified after June 9, 1989 which have a rated heat input capacity between 30 and 100 mmBTU/hr.

- 1) Those gaseous or liquid fuel fired heating systems constructed or modified before April 1, 1972 which are outside Subregion 1 LMAQR and Southeast Wisconsin Interstate AQCR are subject to the following requirements:

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(1)(a), Wis. Adm. Code	0.60 pound per million BTU heat input
Visible Emissions	s. NR 431.04(1), Wis. Adm. Code	Number 2 of the Ringleman chart or 40% opacity

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

- 2) Those gaseous or liquid fuel fired heating systems constructed or modified before April 1, 1972 which are inside Subregion 1 LMAQR and are outside Southeast Wisconsin Interstate AQCR are subject to the following requirements:

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(1)(b), Wis. Adm. Code	0.30 pound per million BTU heat input
Visible Emissions	s. NR 431.04(2), Wis. Adm. Code	Number 1 of the Ringleman chart or 20% opacity

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

- 3) Those gaseous or liquid fuel fired heating systems constructed or modified before April 1, 1972 which are outside Subregion 1 LMAQR and inside Southeast Wisconsin Interstate AQCR are subject to the following requirements:

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(1)(c), Wis. Adm. Code	$E = 0.3 - 0.0006I$ where I is heat input in millions of BTU per hour and E is maximum allowable particulate emissions from any stack in pounds per million BTU heat input.
Visible Emissions	s. NR 431.04(2), Wis. Adm. Code	Number 1 of the Ringleman chart or 20% opacity

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

- 4) Those gaseous or liquid fuel fired heating systems constructed or modified after April 1, 1972 are subject to the following requirements. Those heating systems constructed or modified after June 9, 1989, must be gaseous fuel fired or have a rated heat input capacity less than 10 million BTU/hr in order to fit into this category.

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(2)(a), Wis. Adm. Code	0.15 pound per million BTU heat input
Visible Emissions	s. NR 431.05, Wis. Adm. Code	Number 1 of the Ringleman chart or 20% opacity

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

- 5) Those liquid fuel fired heating systems constructed or modified after June 9, 1989, which have a rated heat input capacity greater than 10 million BTU/hour but less than 30 million BTU/hr are subject to the following requirements:

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(2)(a), Wis. Adm. Code	0.15 pound per million BTU heat input
Sulfur Dioxide	s. NR 440.207(3)(d), Wis. Adm. Code	0.50 pound per million BTU heat input or 0.5 weight percent sulfur
Visible Emissions	s. NR 431.05, Wis. Adm. Code	Number 1 of the Ringleman chart or 20% opacity

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

- 6) Those liquid fuel fired heating systems constructed or modified after June 9, 1989, which have a rated heat input capacity greater than 30 million BTU/hour but less than 100 mmBTU/hr are subject to the following requirements:

<u>Pollutant</u>	<u>Applicable Citation</u>	<u>Limitation/Requirement</u>
Particulate Matter	s. NR 415.06(2)(a), Wis. Adm. Code	0.15 pound per million BTU heat input
Sulfur Dioxide	s. NR 440.207(3)(d), Wis. Adm. Code	0.50 pound per million BTU heat input or 0.5 weight percent sulfur
Visible Emissions	s. NR 440.207(4)(c), Wis. Adm. Code	20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

Other applicable requirements:

1) Malfunction Prevention and Abatement Plans:

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. The plan shall be in writing and updated at least every 5 years. The plan shall, at a minimum, meet all of the requirements of s. NR 439.11, Wis. Adm. Code.

2) Compliance Demonstration by Recordkeeping:

The owner or operator shall keep monthly records which detail the amount and type of fuel used by this heating system. These records shall be adequately detailed so that compliance with all applicable requirements can be determined.

Instructions for Form 4530-140
General Operation Permit Application for Small Heating Systems

This application should be accompanied by Air Pollution Control Operation Permit Application Forms: 4530-100 Facility Identification, 4530-101 Facility Plot Plan, 4530-102 Source and Site Descriptions, 4530-103 Stack Identification

One form should be completed for each accompanying stack identification form 4530-103 associated with each heating system. Only those systems that meet the criteria listed on the following pages are eligible for this general operation permit.

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| Item 1 | Self-explanatory. |
| Item 2 | Facility identification number (FID) from the Air Emission Inventory (AEI). |
| Item 3 | Provide the identification number of the stack which is directly associated with this heating system. This number should also appear on the associated Form 4530-103. |
| Item 4 | Assign an identification number to this heating system (e.g. B21, B22, etc.). This number should also appear on the associated stack form 4530-103. |
| Item 5 | <p>If this heating system is the only significant emission source existing at the facility for which an operation permit is required under ch. NR 407, Wis. Adm. Code, mark <u>yes</u>. If there is at least one more significant emission source at the facility for which an operation permit is required and any of the following application forms are to be submitted, mark <u>no</u>.</p> <ul style="list-style-type: none">4530-104 Boiler or Furnace Operation4530-105 Storage Tanks4530-106 Incineration4530-107 Printing Operations4530-108 Painting and Coating Operations4530-109 Miscellaneous Processes |
| Item 6 | Provide the date of installation or last modification of the heating system (whichever is the most recent). Provide the month and date if after 1971. Please see the instruction book for the definition of "modification". |
| Item 7 | For the purposes of this application, the maximum continuous rating (MCR) of the heating system is equal to its maximum continuous heat input capacity on a 3-hour basis. In other words, MCR refers to the heating system's ability to sustain a maximum heat input for a period of three hours. |
| Item 8 | Provide the names of all of the fuels this system is capable of using. All fuels listed must be Group 1 virgin fossil fuels as defined in s. NR 445.02(11), Wis. Adm. Code. These are natural gas, liquid petroleum gas, distillate fuel oil, gasoline and diesel fuel. |

This application should be accompanied by Air Pollution Control Operation Permit Application Forms 4530-100, 4530-101, 4530-102, and 4530-103.

NOTE: Use of this form is required by the Department for an air pollution control permit application filed pursuant to ss. 144.391(3m) and 144.3925, Wis. Stats., and NR 407.10(3), Wis. Adm. Code, for a small heating system. Small heating systems which do not meet the criteria for filing a General Permit Application or which would prefer to file an individual operation permit application should proceed to complete Air Pollution Control Permit Application form 4530-104. The Department will not consider or act upon your general permit application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

1) Facility Name:	2) Facility Identification No.:
3) Stack No.:	4) Unit No.:

- 5) At least one of the following operation permit application forms will be submitted for this facility: 4530-104, 4530-105, 4530-106, 4530-107, 4530-108, 4530-109 ☐ Yes ☐ No
- 6) Date of installation or latest modification _____
- 7) What is the maximum continuous rating of the heating system? _____ mmBTU/hr
- 8) What type of fuel fires this heating system?
Pick the appropriate box and give fuel type (i.e. Natural Gas, #2 Fuel oil, etc.)
- ☐ Gaseous fuel

- ☐ Liquid fuel

Please complete Form 4530-134, Index of Air Pollution Application Forms.